POLARIS
The Way Out.

Sportsman MV

MILITARY SERVICE MANUAL ADDENDUM

PN 9920082

Use this addendum with the 2005 Sportsman MV7 Service Manual (PN 9919963)

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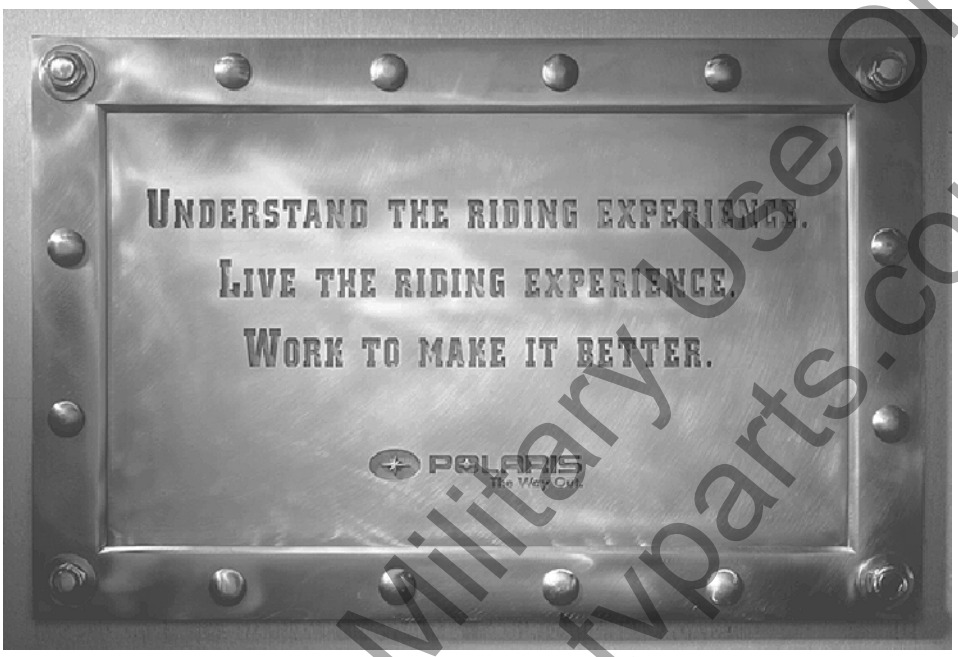

2005 SPORTSMAN MV
Military Service Manual Addendum

Foreword

This manual addendum is designed primarily for use by certified Polaris Master Service Dealer technicians in a properly equipped shop and should be kept available for reference. All references to left and right side of the vehicle are from the operator's perspective when seated in a normal riding position.

Some procedures outlined in this manual require a sound knowledge of mechanical theory, tool use, and shop procedures in order to perform the work safely and correctly. Technicians should read the text and be familiar with service procedures before starting the work. Certain procedures require the use of special tools. Use only the proper tools as specified.

This manual addendum includes procedures for maintenance operations, component identification and unit repair, along with service specifications for 2005 Polaris Sportsman MV7 ATVs. Comments or suggestions about this manual may be directed to: Service Publications Dept. @ Polaris Sales Inc. 2100 Hwy 55 Medina Minnesota 55340.

2005 Sportsman MV Service Manual Military Addendum

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IMPORTANT NOTICE ABOUT THIS ADDENDUM

This 2005 Sportsman MV Military Addendum should be used with the 2005 Sportsman MV$_7$ Service Manual (**PN 9919963**) to cover all serviceable components of the the Sportsman MV .

The material supplied in the 2005 Sportsman MV Military Addendum adds to the information supplied in the 2005 Sportsman MV$_7$ Service Manual (**PN 9919963**). This addendum is formatted in the same format as the service manual. The following Chapter's have been supplied with this addendum to cover the 2005 Sportsman MV:

- Chapter 1 General Information & Specs
- Chapter 5 Body and Steering
- Chapter 10 Wiring & Wiring Schematic

UNDERSTANDING SAFETY LABELS AND INSTRUCTIONS

Throughout these instructions, important information is brought to your attention by the following symbols:

The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

⚠ DANGER

Failure to follow DANGER instructions will result in severe injury or death to the operator, bystander or person inspecting or servicing the ATV.

⚠ WARNING

Failure to follow WARNING instructions could result in severe injury or death to the operator, bystander or person inspecting or servicing the ATV.

CAUTION:

A CAUTION indicates special precautions that must be taken to avoid personal injury, or ATV or property damage.

NOTE:

A NOTE provides key information to clarify instructions.

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WARRANTY

LIMITED WARRANTY

Polaris Sales Inc., 2100 Highway 55, Medina, MN 55340, gives a THREE MONTH LIMITED WARRANTY on all components of the Polaris MV 700 4x4 and the Polaris MV 500 6x6 ATVs against defects in material or workmanship. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferable to another consumer during the warranty period through a Polaris dealer.

REGISTRATION

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to Polaris within ten days. Upon receipt of this registration, Polaris will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be the warranty entitlement. If you have not signed the original registration and received the customer copy, please contact your dealer immediately. NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR VEHICLE IS REGISTERED WITH POLARIS.

Initial dealer preparation and set-up of your vehicle is very important in ensuring trouble-free operation. Purchasing a machine in the crate or without proper dealer set-up will void your warranty coverage.

WARRANTY COVERAGE AND EXCLUSIONS: LIMITATIONS OF WARRANTIES AND REMEDIES

The Polaris limited warranty excludes any failures that are not caused by a defect in material or workmanship. This warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any vehicle that has been altered structurally, neglected, improperly maintained, used for racing, or used for purposes other than for which it was manufactured, or for any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts. In addition, this warranty does not cover physical damage to paint or finish, stress cracks, tearing or puncturing of upholstery material, corrosion, or defects in parts, components or the vehicle caused by fire, explosions or any other cause beyond Polaris' control.

This warranty does not cover the use of unauthorized lubricants, chemicals, or fuels that are not compatible with the vehicle. The exclusive remedy for breach of this warranty shall be, at Polaris' exclusive option, repair or replacement of any defective materials, or components or products. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. Some states do not permit the exclusion or limitation of incidental or consequential damages or implied warranties, so the above limitations or exclusions may not apply to you if inconsistent with controlling state law.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE ABOVE SIX MONTH WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

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HOW TO OBTAIN WARRANTY SERVICE

If your vehicle requires warranty service, you must take it to a Polaris Servicing Dealer. When requesting warranty service you must present your copy of the Warranty Registration form to the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY). Polaris suggests that you use your original selling dealer; however, you may use any Polaris Servicing Dealer to perform warranty service.

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance they will contact the appropriate person at Polaris.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

Lubricants

1. Mixing oil brands or using non−recommended oil may cause engine damage. We recommend the use of Polaris engine oil.
2. Damage resulting from the use of non−recommended lubricants may not be covered by warranty.

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CHAPTER 1 *

GENERAL

Specs

1

Model Identification 1.2
Serial Number Location 1.2
Model Number 1.2
Specifications - Sportsman MV 1.3-1.4
Publication Numbers 1.5
Paint Codes 1.5
Starting the Sportsman MV 1.6
Controls – Sportsman MV 1.7
Winch Opertaion 1.8

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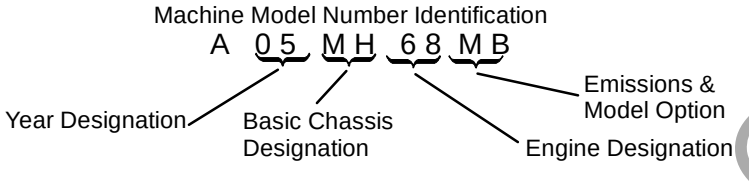
NOTICE:

THIS IS UPDATED INFORMATION. USE THIS INFORMATION WITH CHAPTER 1 IN THE 2005 SPORTSMAN MV7 MANUAL PROVIDED TO PROPERLY SERVICE THIS UNIT.

MODEL IDENTIFICATION

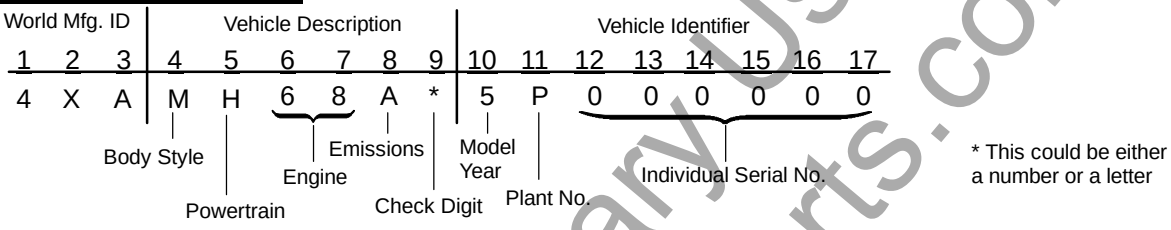
The machine model number must be used with any correspondence regarding warranty or service.



ENGINE DESIGNATION NUMBERS

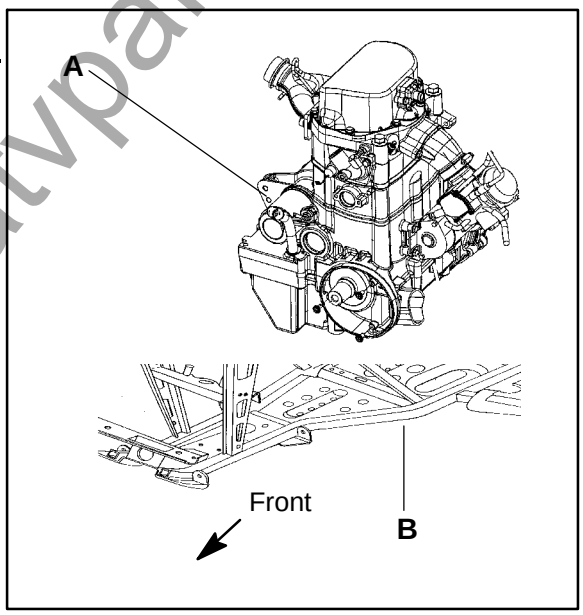
EH068OLE11 . . . . . Twin cylinder, Liquid Cooled, 4 Stroke, Electric Start

VIN IDENTIFICATION


World Mfg. ID
Vehicle Description
Vehicle Identifier
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
4 X A M H 6 8 A * 5 P 0 0 0 0 0 0
Body Style
Powertrain
Engine
Emissions
Check Digit
Model Year
Plant No.
Individual Serial No.
* This could be either a number or a letter

ENGINE SERIAL NUMBER LOCATION

Whenever corresponding about an engine, be sure to refer to the engine model number and serial number. This information can be found on the sticker applied to the top side of the crankcase (A). An additional number is stamped on the side of the crankcase beneath the cylinder coolant elbow.

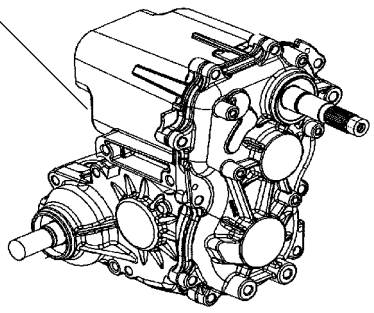


MACHINE MODEL NUMBER AND SERIAL NUMBER LOCATION

The machine model number and serial number are important for vehicle identification. The machine serial number is stamped on the lower left side of the frame tube.(B)

TRANSMISSION I.D. NUMBER LOCATION

The transmission I.D. number is located on the right side of machine.



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MODEL: ..... 2005 SPORTSMAN MV
MODEL NUMBER: . A05MH68MB
ENGINE MODEL: .. EH068OLE

Category	Dimension / Capacity
Length	**89 in./226 cm**
Width	**48 in./122 cm**
Height w/ Rollbar	**58 in./147 cm**
Wheel Base	**50.75 in./129 cm**
Dry Weight	**1042 lbs./450 kg**
Gross Vehicle Weight	**1900 lbs./709 kg**
Front Rack Capacity	**200 lbs./75 kg**
Rear Rack Capacity	**400 lbs./150 kg (Rear rack capacity and tongue weight not to exceed 400 lbs./150 kg)**
Towing Capacity	**1500 lbs./681 kg**
Hitch Tongue Capacity	**150 lbs./68 kg**
Winch Capacity (Front/ Rear)	**2500 lbs (1134 kg) each**
Body Style	**Spirit**

2005 SPORTSMAN MV7
(Civilian Version Shown)

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GENERAL INFORMATION

MODEL: ..... 2005 SPORTSMAN MV
MODEL NUMBER: . A05MH68MB
ENGINE MODEL: . . EH068OLE

Engine	
Platform	Polaris Twin Cylinder
Engine Model Number	EH0680LE017
Engine Displacement	683cc
Number of Cylinders	2
Bore & Stroke (mm)	80 x 68 mm
Compression Ratio	9.78:1
Compression Pressure	150-170 psi
Engine Idle Speed	1200 ± 50 RPM
Engine Max Operating Rpm	6000 Rpm ± 200 Rpm
Cooling System / Capacity	Liquid - 3.2 qt / 3 ltr
Overheat Warning	HOT on Instrument Cluster
Lubrication	Pressurized Wet Sump
Oil Requirements / Capacity	Polaris 0W-40 2 qt. / 1.9 ltr
Exhaust System	Single Pipe
Carburetion	
Carburetor model	Mikuni BST 34mm
Main Jet	157.5
Pilot Jet	45
Pilot Air Jet	160
Jet Needle - Clip Position	4HB41-4
Needle Jet	P-6 (829)
Pilot Screw	Initial Setting 2 3/8 Turns Out (Initial starting point, setting may vary)
Float Height	13 mm ± 1 / 0.51 in ± 0.04
Fuel Delivery	Fuel Pump
Fuel Capacity / Requirement	Front - 4.25 gal US / 16 ltr Rear - 4.0 gal US / 15 ltr 87 Octane (minimum) 89 Oxygenated
Electrical	
Alternator Output	330 w @ 3000 RPM
Voltage Regulator	3-Phase - Sure Power
Lights : Pod	50 watts
Grill	Two x 37 watts
Brake	Two x 8.26 watts
Tail	Two x 26.9 watts
Ignition System	DC/CDI Ignition
Ignition Timing	13° BTDC @ 1200 RPM
Spark plug / Gap	RC7YC/ .035 in. / 0.9 mm
Battery / Model / Amp Hr	30 Amp Hr
Starting	Electric / Recoil Backup
Instrument Cluster	LCD

Drivetrain		
Transmission Type		Drumshift - H/L/N/Rev/Park
Transmission Capacity		15.2 oz. / 450m
Rear Gearcase Capacity		10 oz. / 300ml
Front Gearcase Capacity		5 oz. / 150ml
Gear Ratio :	Low	7.5:1
	Rev	5.11:1
	High	2.89:1
	Front Drive	3.82:1
	Rear Drive	3.10:1
Clutch Type		PVT w/EBS
Belt		3211091
Steering / Suspension		
Front Suspension / Shock		A-arm / MacPherson Strut
Front Travel		8.2 in. / 21 cm
Rear Suspension / Shock		Progressive Rate Independent /Two x 2" Coil-over Shock
Rear Travel		9.5 in. / 24.13 cm
Ground Clearance		10.5 in. / 26.7 cm
Shock Preload Adjustment Front / Rear		Front -Non Adjustable. Rear - Ratchet Style- Std.
Turning Radius		71.5 in. / 181.6 cm unloaded
Toe Out		0 - 1/16 in / .0 - .159 mm
Wheels / Brakes		
Wheel Size / Pattern - Front		25x8-12 / 4-156
Wheel Size / Pattern - Rear		25x10-12 / 4-156
Recommended Air Pressure F / R		5 psi Front 5 psi Rear
Brake - Front		Dual Hydraulic Disc
Brake - Rear		Dual Hydraulic Disc

JETTING CHART

Altitude		AMBIENT TEMPERATURE	
		Below 40°F Below 5°C	Above +40°F Above +5°C
Meters (Feet)	0-1800 (0-6000)	162.5	157.5
	above 1800 (above 6000)	155	150

CLUTCH CHART

EBS Models have no helix/spring adjustment

Altitude		Shift Weight	Drive Spring	Driven Spring	Driven Helix
Meters (Feet)	0-1800 (0-6000)	20-56 (5631215)	Blu/Grn (7041157)	Wht/ Yel (7041635)	EBS 41-37 (5132751)
	1800-3700 (6000-12000)	20-54 (5631214)	Blu/Grn (7041157)	Wht/ Yel (7041635)	EBS 41-37 (5132751)

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PUBLICATION NUMBERS

Model	Model No.	Owner's Manual PN	Parts Manual PN	Service Manual PN	Service Manual Addendum
Sportsman MV (Military Version)	A05MH68MB	9919959	9919956	9919963	* 9920082

* Contact Polaris Industries for copies of the Service Manual Addendum. Other publications can be ordered through regular ordering routes.

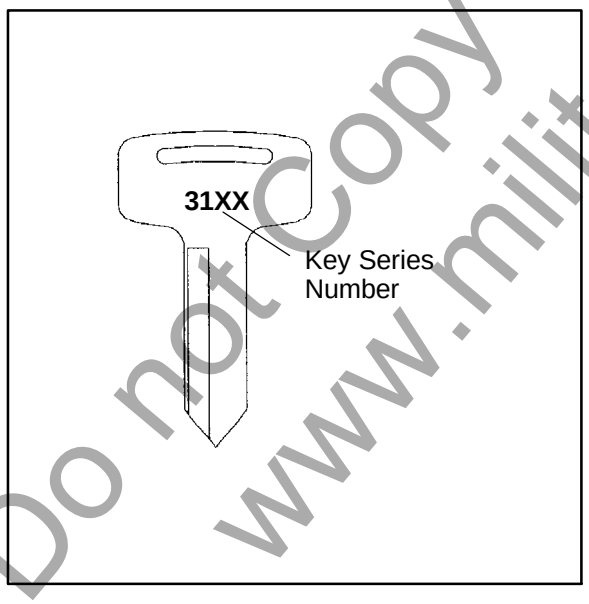
PAINT CODES

PAINTED PART	COLOR DESCRIPTION	POLARIS NUMBER
Frame/ Cab	Flat Black	P-463

Order direct from Midwest Industrial Coatings (952-942-1840). Mix as directed.

REPLACEMENT KEYS

NOTE: The military Sportsman MV's do not have a key start. This is for informational purposes only. Replacement keys can be made from the original key. To identify which series the key is, take the first two digits on the original key and refer to the chart to the right for the proper part number. Should both keys become lost, ignition switch replacement is required.



Series #	Part Number
20	**4010278**
21	**4010278**
22	**4010321**
23	**4010321**
27	**4010321**
28	**4010321**
31	**4110141**
32	**4110148**
67	**4010278**
68	**4010278**

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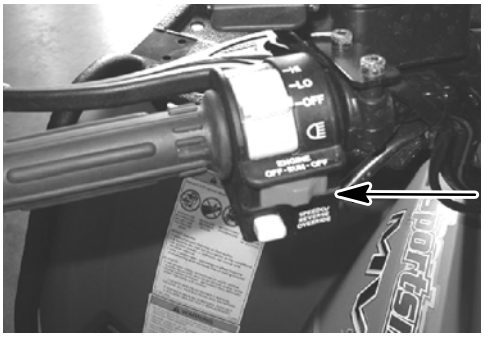
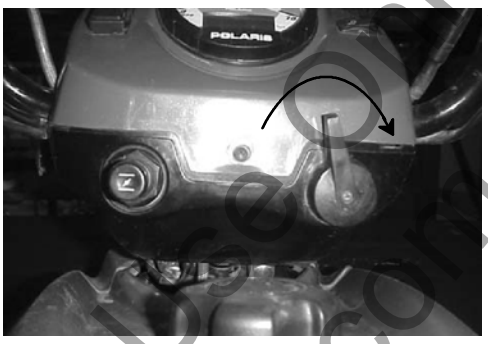
STARTING THE SPORTSMAN MV

1. Turn Engine Switch to **RUN**



2. Turn the Start Switch to the Right

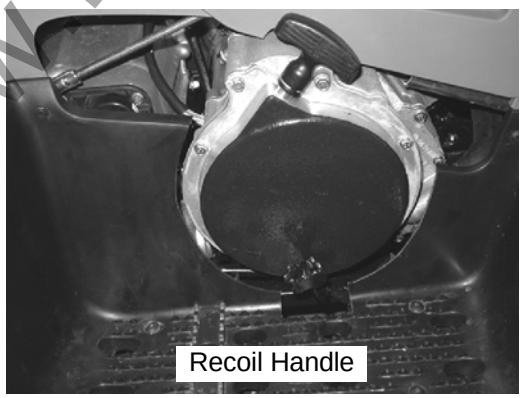


3. A padlock maybe placed through the security lock and shifter.

NOTE: If the MV is locked, the MV will be in Park when started.

Recoil Start

If the starter switch will not start the MV, pull the recoil handle located on the right side of the machine. The Engine Run switch must be on.



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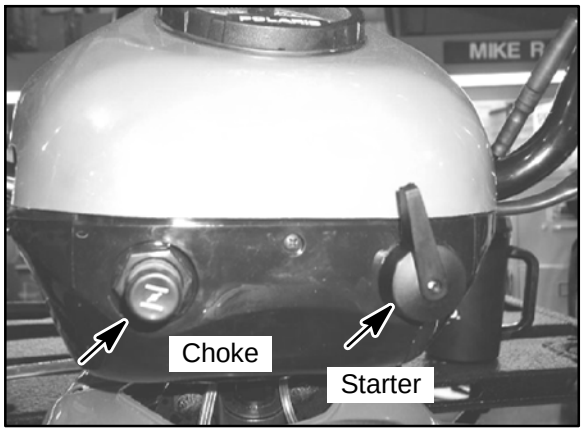
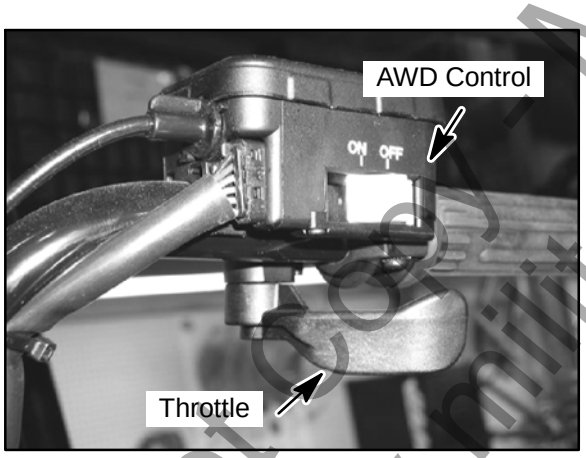
SPORTSMAN MV CONTROLS

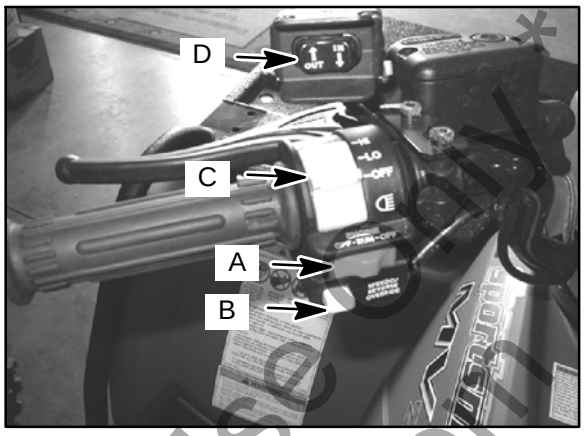
Starter Switch – Located on headlight pod. Turn switch to right to start MV. Use choke if necessary.



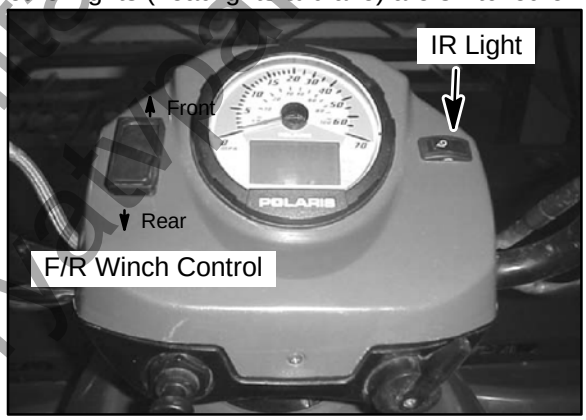
AWD Control / Throttle Lever (Right Handlebar)– The throttle controls engine speed and vehicle movement. The AWD control switches the MV into AWD on–demand. See the Owner's Manual for more details on Polaris AWD.



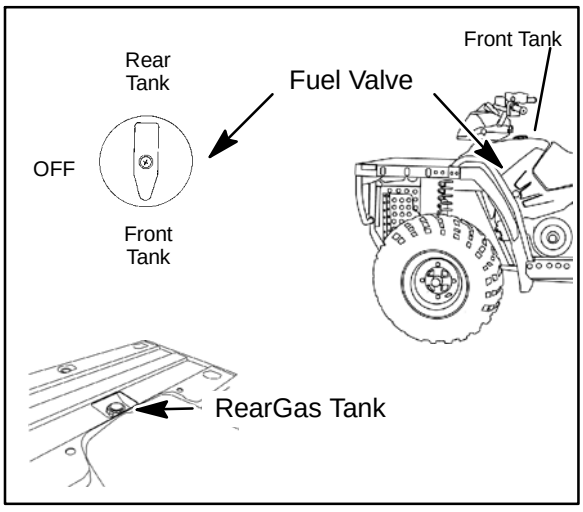
Engine Stop/Run Switch (A) – Provides operator with ability to easily stop engine. The switch must be in the run position to start the MV.
Mode Reverse/Override Switch (B) – This vehicle is equipped with a reverse speed limiter system. To gain additional power while backing, depress the override switch. **NOTE:** The override switch also allows activation of Demand 4 Drive (All Wheel Drive) in reverse, if the Demand 4 Drive switch is on. This switch is also used to toggle through the information center on the instrument cluster.
Headlamp Switch (C) – Controls the headlights for High Beam, Low Beam, and Light shutoff.
Winch Control (D) – The winch control give the operator the ability to control winch cable direction or In and Out.



Front / Rear Winch Selection Switch – Let's operator choose the Front or Rear winch. Power is switched to the Front winch or Rear winch via the switch.
Infrared (IR) Light Control Switch (if equipped) – Infra red light is an optional item that mounts on the front bumper. **NOTE:** When the IR light is switched on all other lights (headlights & brake) are switched off.



Fuel Valve – The fuel valve allows the operator to switch between the front gas tank and rear gas tank located behind the seat. It is recommended to use the rear tank first, the operator can use the front fuel gauge to view the remaining front tank.



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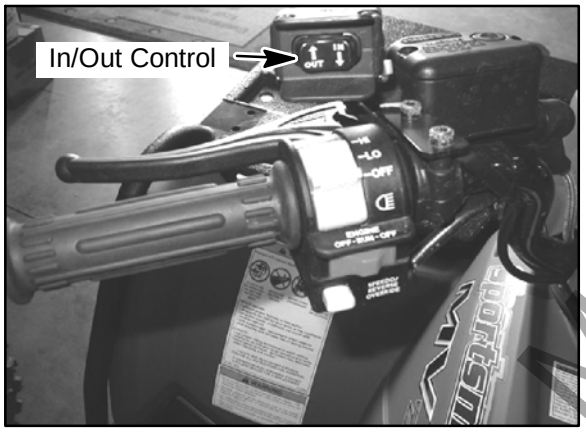
WARN® WINCH OPERATION

The Sportsman MV is equipped with two 2500 lb. (2.5ci) Warn® Winches. One winch in the front and one in the rear of the MV.

Winch Handlebar Controls

The winch selection switch located on the left handlebar gives the operator the ability to select the front or rear winch.

The IN / OUT control controls the direction of the cable for the winch. **IN** pulls the cable into the winch and **OUT** feeds the cable out of the winch.

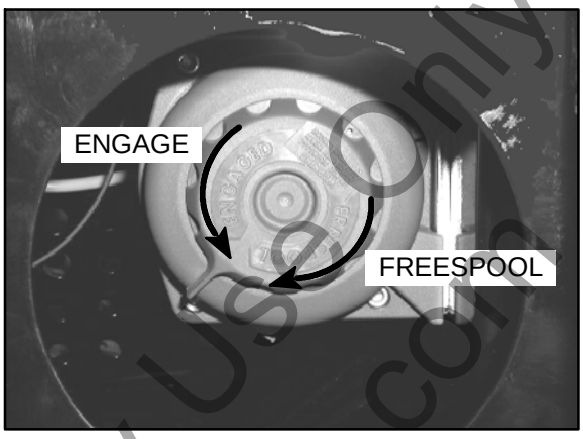


Winch Control

The winch control located on the side of the winch gives the operator easy access to switch between **ENGAGED** and **FREESPOOL**.

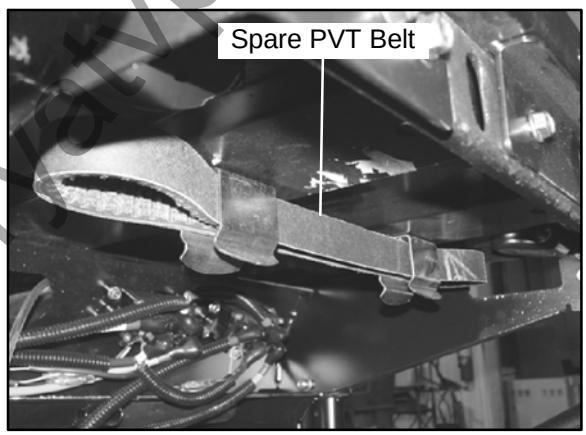
When the winch is ENGAGED, the winch only allows the cable to be pulled IN or released OUT via the controls on the handlebar.

When the winch is FREESPOOL, the winch allows the cable to be pulled out freely. **NOTE:** The switch on the handlebar does have to be in the OUT position.



SPARE PVT BELT

There is a spare PVT drive belt located under the left rear fender. For installation of the PVT belt refer to Chapter 6 in the Service Manual provided.



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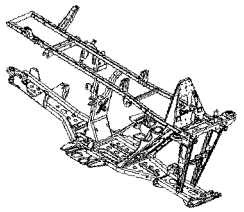
CHAPTER 5 *

BODY AND STEERING

Tow Bar Setup 5.2–5.3
Accessory Guerney Install 5.4
Front Roll Bar 5.4
Rack / Body Exploded View 5.5–5.6



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NOTICE:
THIS IS UPDATED INFORMATION. USE THIS INFORMATION WITH CHAPTER 5 IN THE 2005 SPORTSMAN MV7 MANUAL PROVIDED TO PROPERLY SERVICE THIS UNIT.

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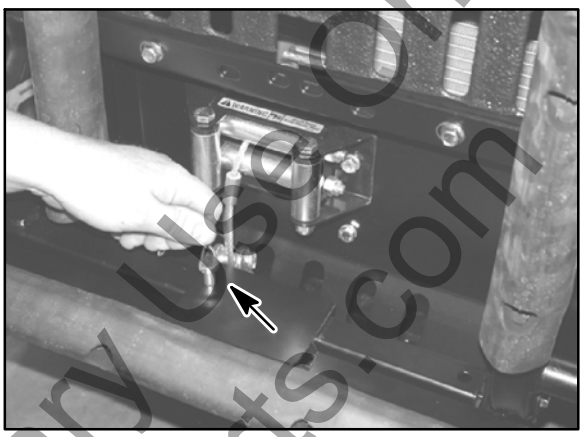
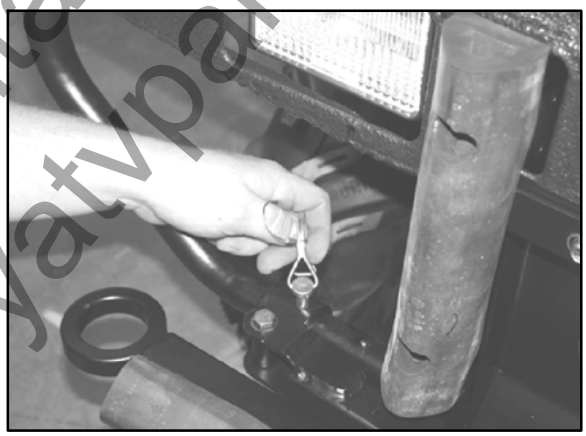
CHAPTER 5 – BODY & STEERING

NOTE: The information for Chapter 5 has been modified for the 2005 Sportsman MV7 military model. Use this information in place of or with Chapter 5 in the 2005 consumer version of the Sportsman MV7 Service Manual provided with the unit.

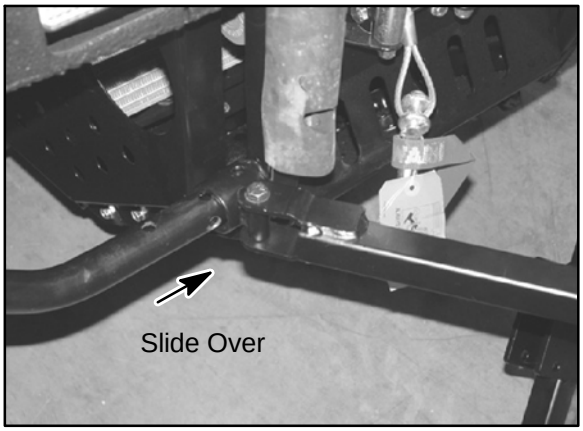
TOW BAR SETUP

1. Remove the tow bar secure pin from center of tow bar. Remove the two tow bar secure pins from each side of the bumper Extend the tow bar section outward.





2. Slide the tow bar collars over to the next available pin hole on the bumper.



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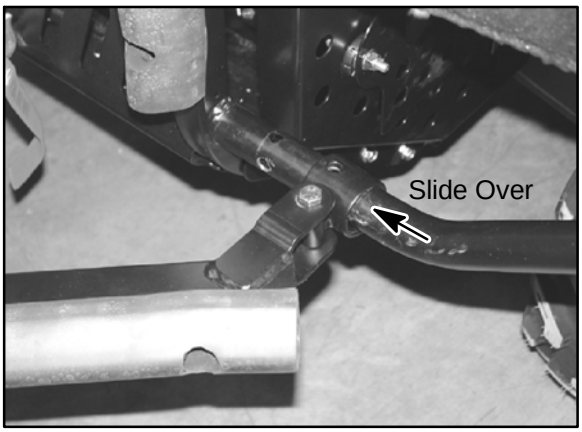
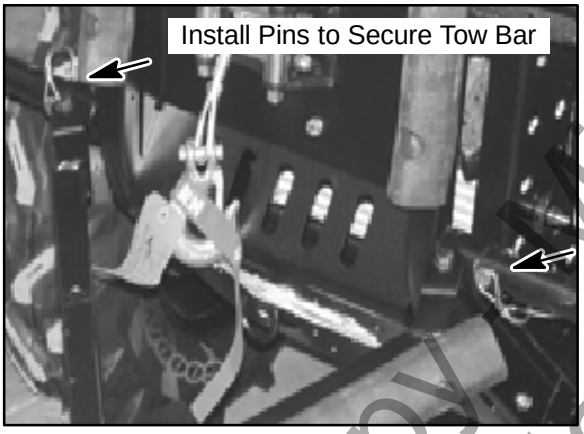
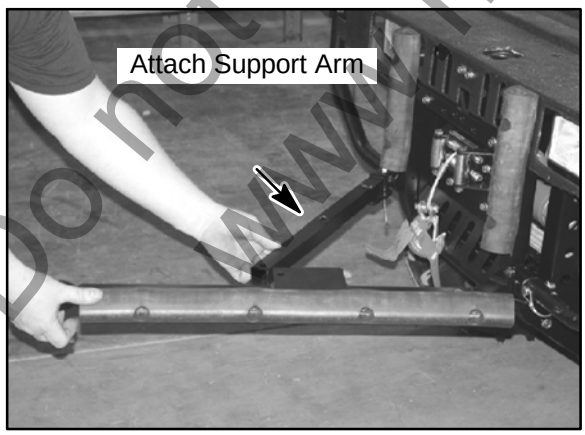


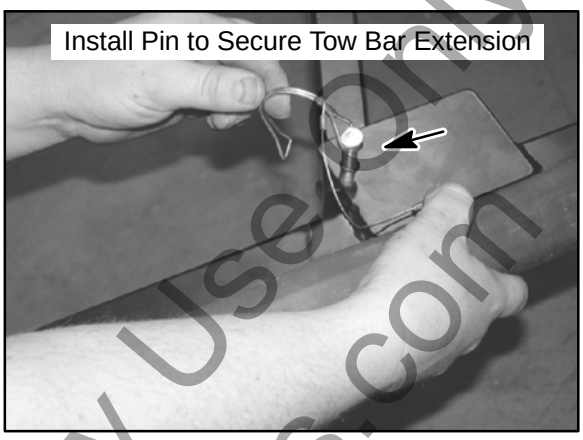
3. Secure the tow bar with the same tow bar secure pins. Install the pins into the holes so that the tow bar collars are on the inside of the tow bar pins.

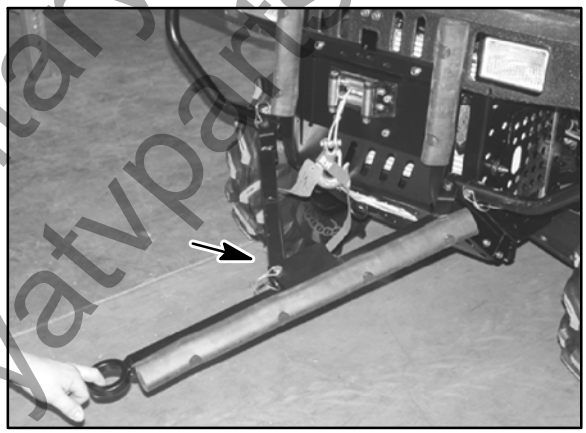


4. With the tow bar extended, secure the tow bar support arm.



5. Secure the tow arm to the extension arm with the secure pin.





6. To disassemble the tow bar reverse the setup steps above.

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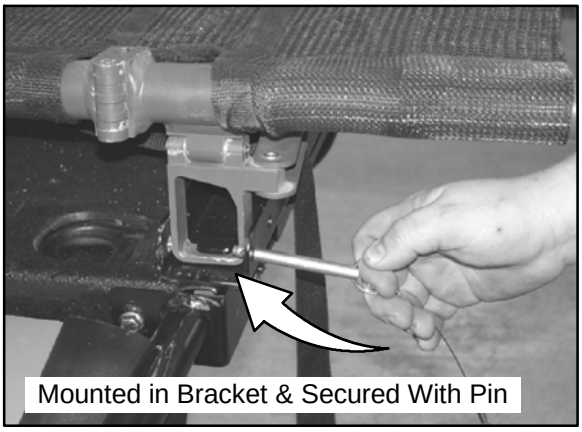
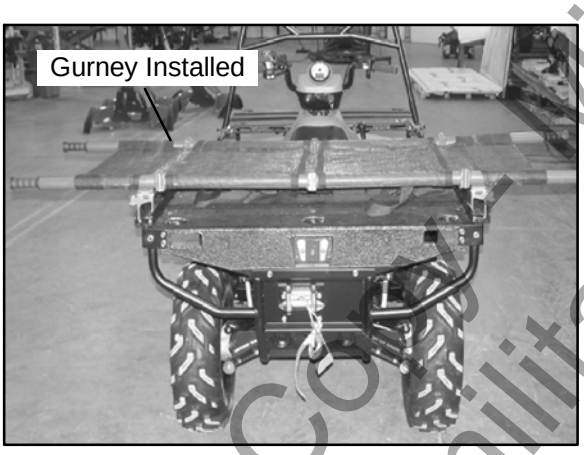
ACCESSORY GURNEY INSTALLATION

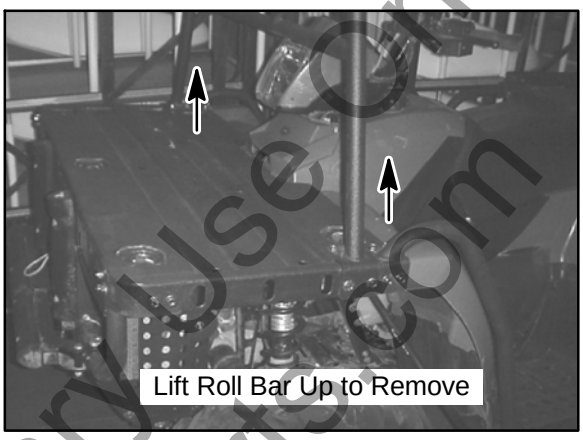
1. Install the gurney onto the rear rack Be sure the gurney mount slides into the mounting bracket on the rack (see photo). Secure the gurney with the pin on both sides.

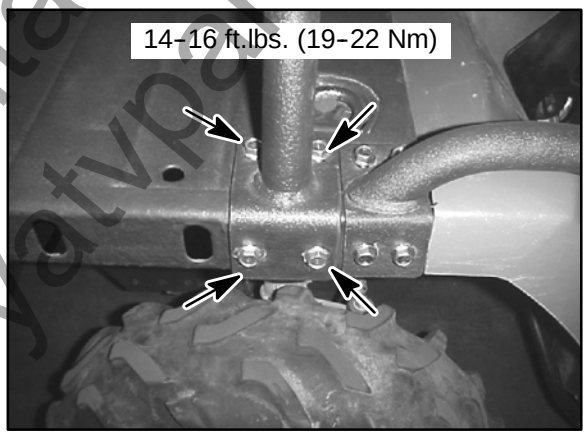




FRONT ROLL BAR REMOVAL/INSTALL

1. Remove the four bolts (each side) that secure the roll bar to the frame.





2. To install the roll bar, install the roll bar and reinstall 4 bolts each side. Torque bolts to 14–16 ft.lbs. (19–22 Nm).

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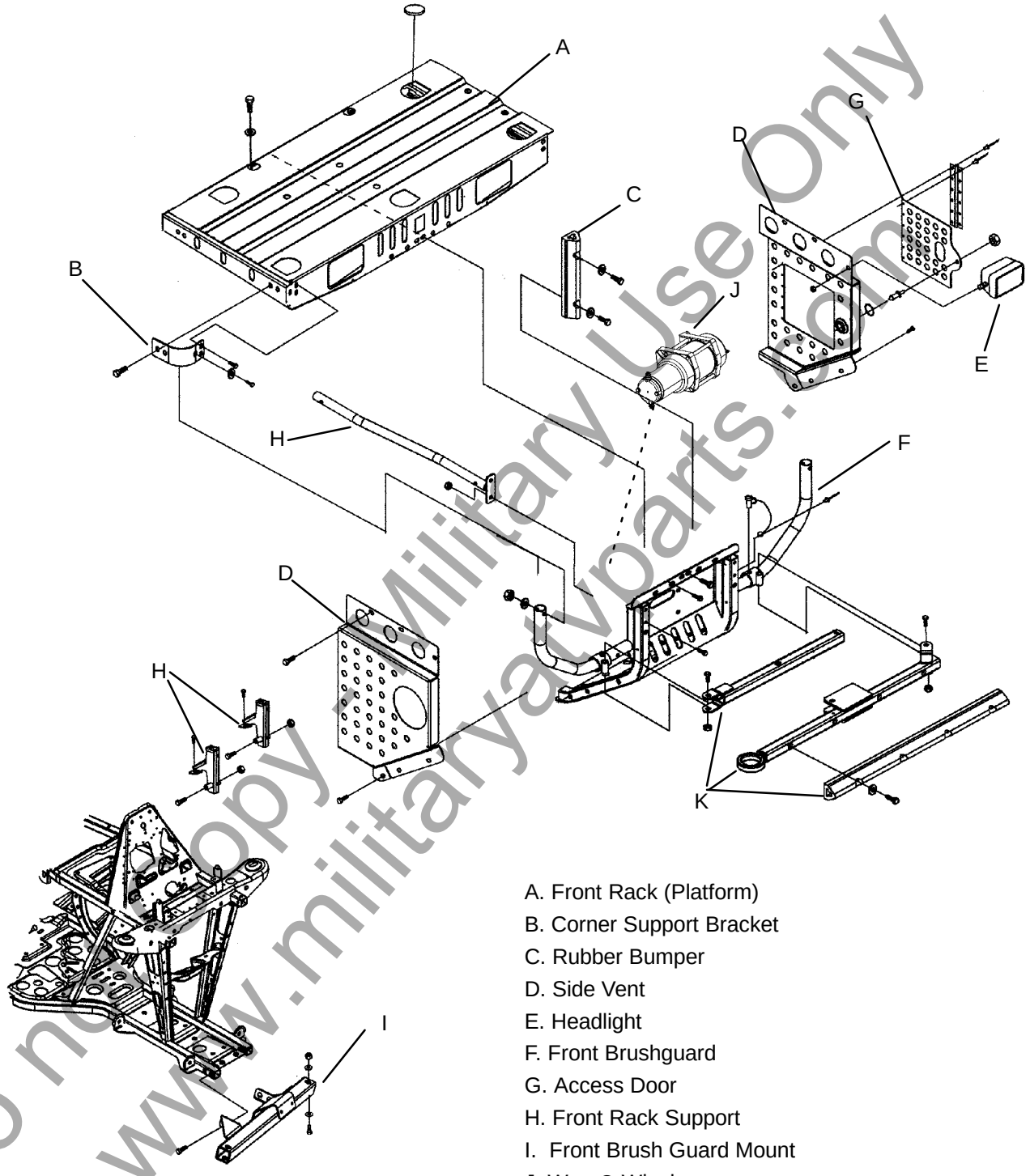
BODY / RACK EXPLODED VIEW



A. Front Rack (Platform)
B. Corner Support Bracket
C. Rubber Bumper
D. Side Vent
E. Headlight
F. Front Brushguard
G. Access Door
H. Front Rack Support
I. Front Brush Guard Mount
J. Warn® Winch
K. Tow Bar Assembly

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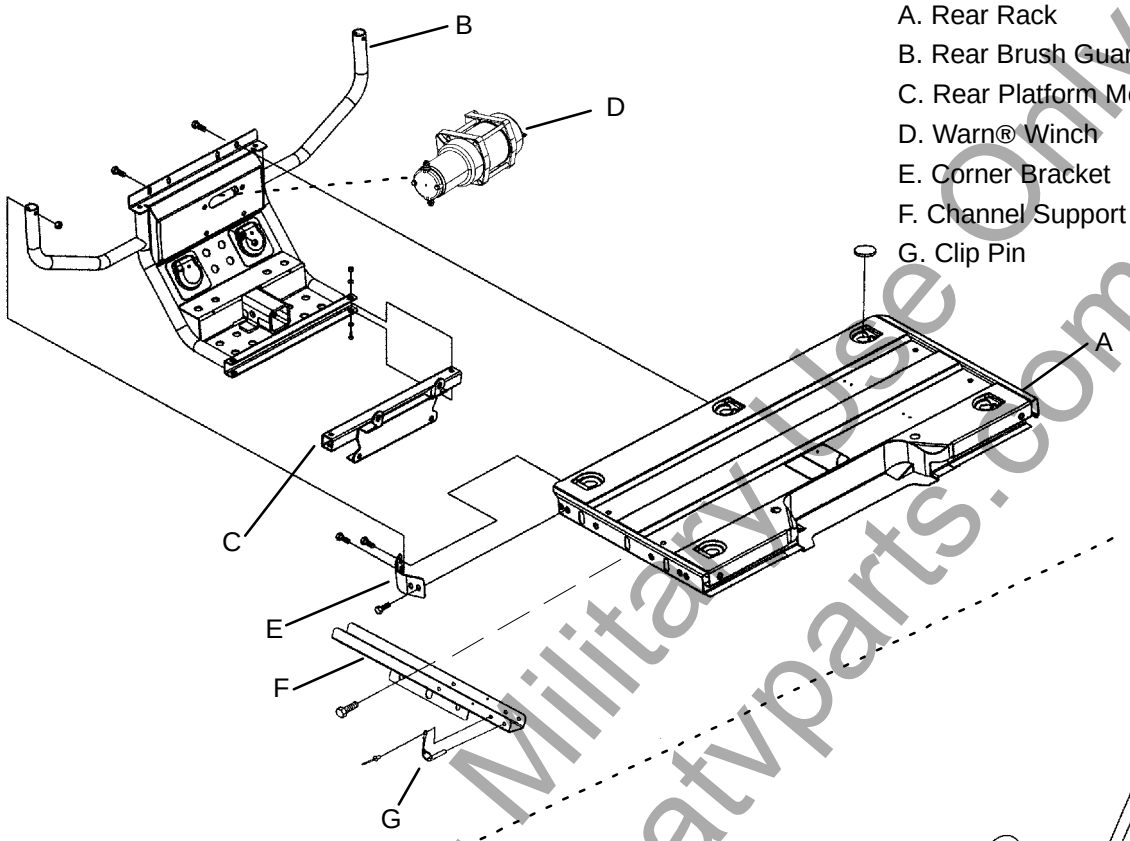
BODY / RACK EXPLODED VIEW

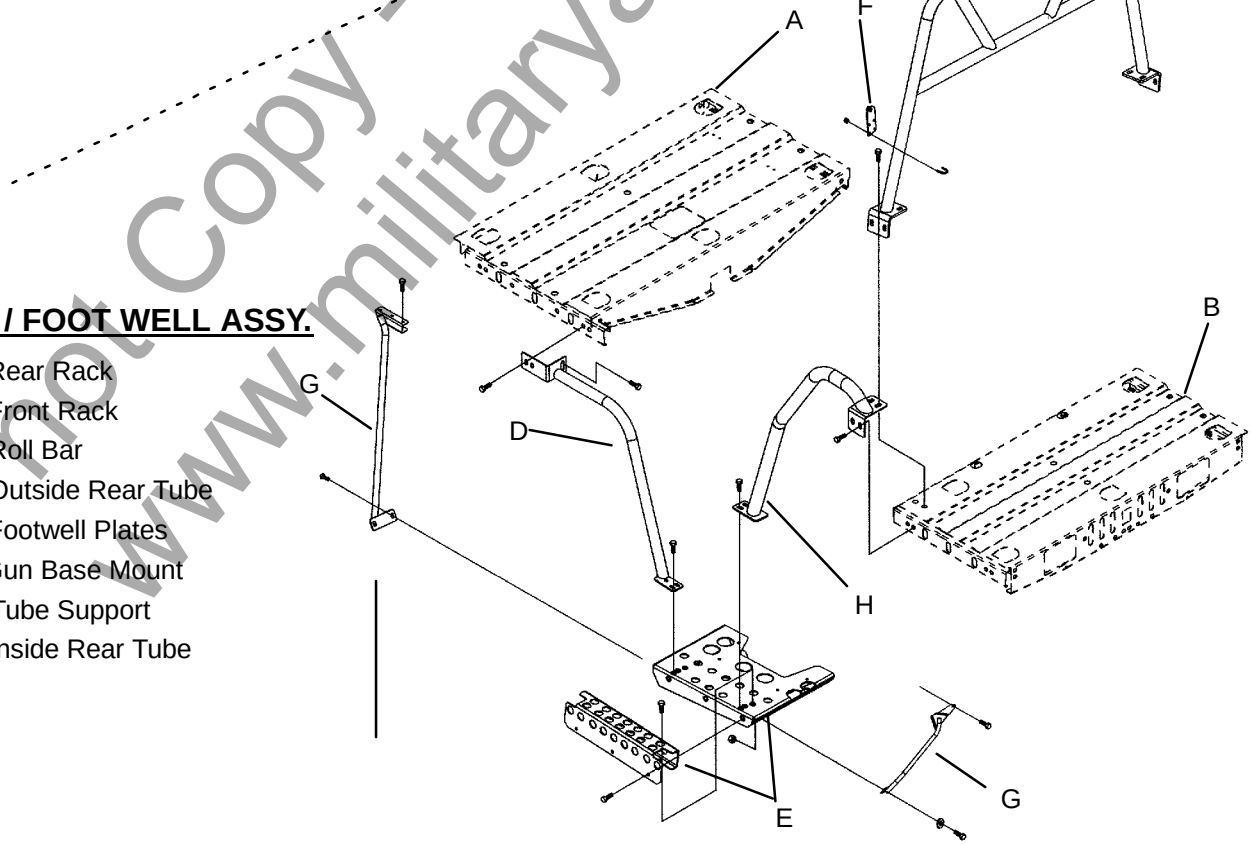
REAR RACK / GAURD

A. Rear Rack
B. Rear Brush Guard
C. Rear Platform Mount
D. Warn® Winch
E. Corner Bracket
F. Channel Support
G. Clip Pin



RACKS / FOOT WELL ASSY.

A. Rear Rack
B. Front Rack
C. Roll Bar
D. Outside Rear Tube
E. Footwell Plates
F. Gun Base Mount
G. Tube Support
H. Inside Rear Tube



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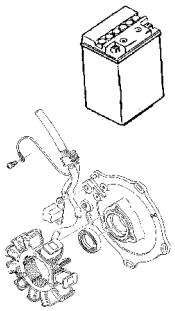
CHAPTER 10

ELECTRICAL

IR Light Information 10.2



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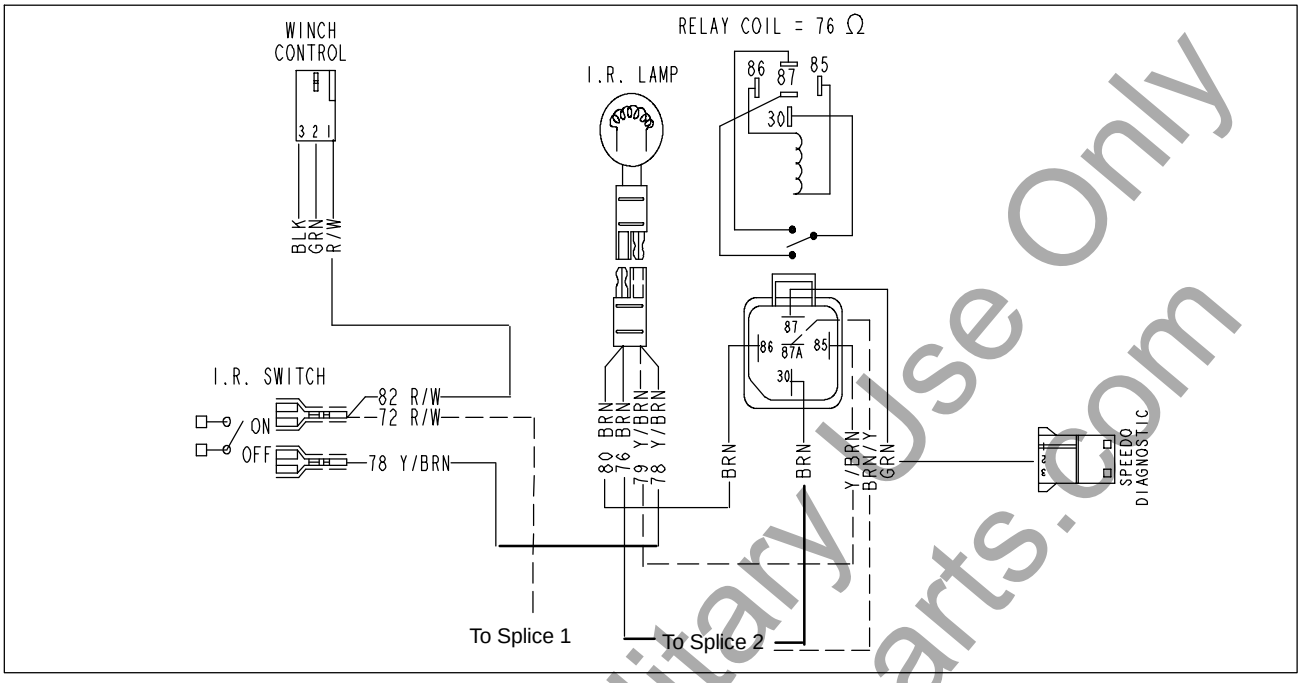
NOTICE:

THIS IS UPDATED INFORMATION. USE THIS INFORMATION WITH CHAPTER 5 IN THE 2005 SPORTSMAN MV7 MANUAL PROVIDED TO PROPERLY SERVICE THIS UNIT.

10

IR RELAY OPERATION



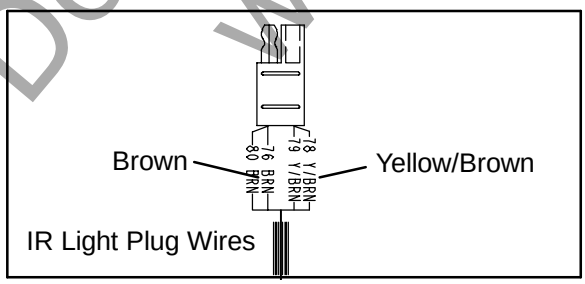
NOTE: When the IR light is switched on all other lights (headlights, brake, instrument illumination) are switched off.

OPERATION – When the IR switch is turned to the "ON" position, the IR relay functions as follows:

- Positive battery power is applied to the IR lamp via the Yellow/Brown wire from the IR switch
- Positive battery power is applied to the IR relay via the second Yellow/Brown wire, thereby activating the relay.
- This opens the ground connection between the Brown/Yellow and Brown. This disables the headlights, taillight, and brake lights.
- The Green wire is contacted to Brown (Ground), disabling the instrument display illumination.

IR LIGHT TEST

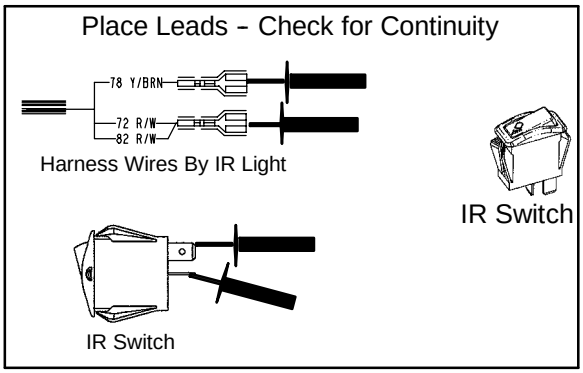
Remove the connector to the IR light. Probe the IR plug wires (Brown and Yellow/Brown) at back of connector. Turn IR light on.



IR LIGHT SWITCH TEST

Use a voltmeter to check for continuity in the IR Switch.

- First unplug the harness from the IR light and probe the wires that lead to the switch.
- Turn the switch on and if there is continuity the switch is ok. If there is not continuity, check the switch prongs for continuity. Replace switch if no continuity is found.



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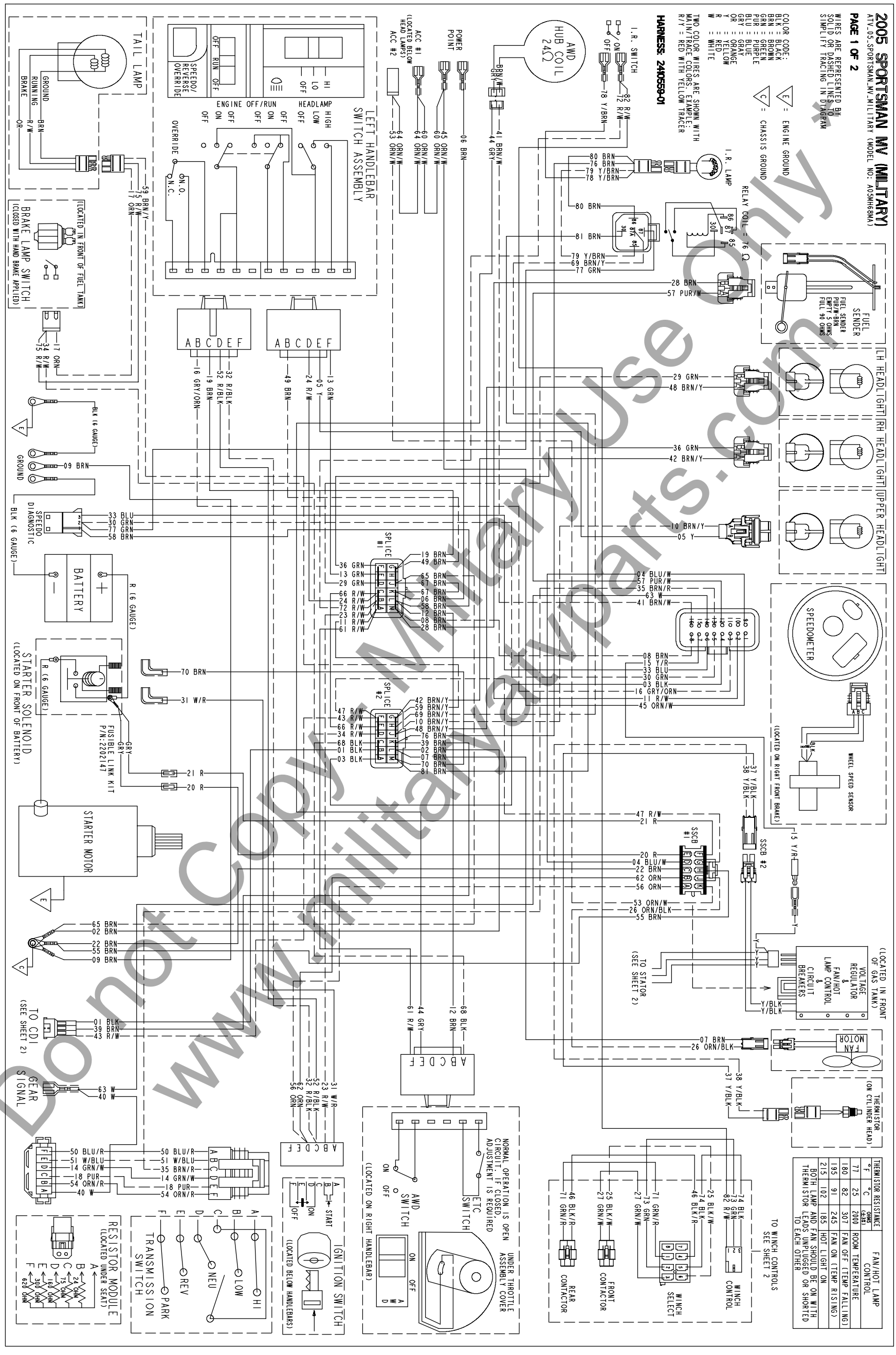
WIRING DIAGRAM 2005 SPORTSMAN MV (MILITARY VERSION)



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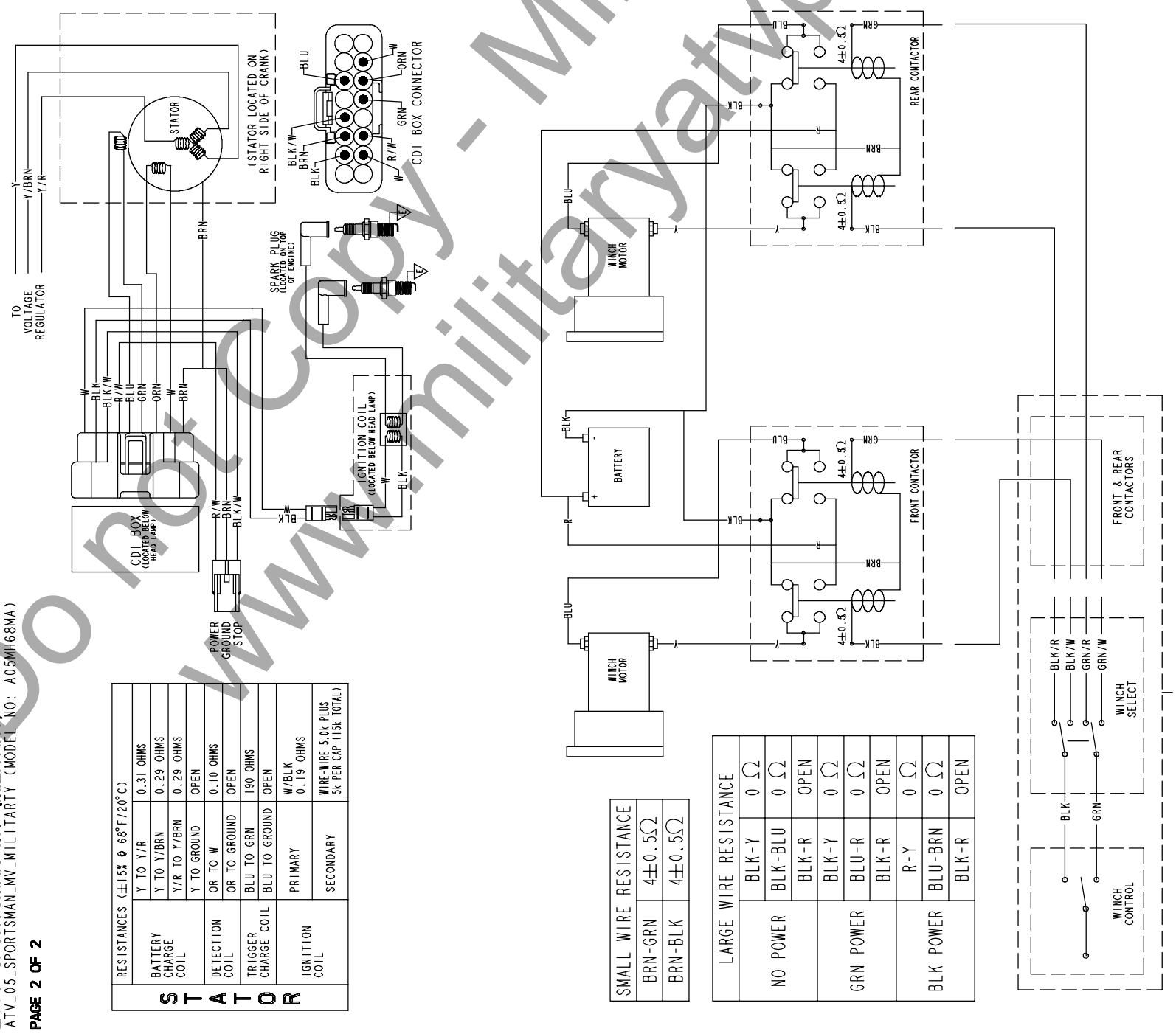
ELECTRICAL

WIRING DIAGRAM 2005 SPORTSMAN MV (MILITARY VERSION)

WIRE TERMINATION TABLE

GAUGE	FROM CONNECTOR	TO CONNECTOR
20	CDI	SPLICE #2
16	GROUND	SPLICE #2
20	SPEEDOMETER	SPLICE #2
20	SPEEDOMETER	SSCB #1
18	UPPER HEADLIGHT	LH HANDLEBAR
16	POWER POINT	SPLICE #1
16	FAN MOTOR	SPLICE #2
20	SPEEDOMETER	SPLICE #1
14	GROUND	FRAME GROUND
18	UPPER HEADLIGHT	SPLICE #2
20	SPEEDOMETER	SPLICE #1
20	ETC AND AWD SWITCH	SPLICE #1
18	LH HANDLEBAR	SPLICE #1
18	TRANS SWITCH	RESISTOR MODULE
20	CDI	SPEEDOMETER
20	SPEEDOMETER	LH HANDLEBAR
18	TAILLIGHT	BRAKE LIGHT SENSOR
18	TRANS SWITCH	RESISTOR MODULE
20	LH HANDLEBAR	SPLICE #1
16	FUSIBLE LINK	SSCB #1
16	FUSIBLE LINK	SSCB #1
18	SSCB #1	GROUND
18	IGNITION SWITCH	SPLICE #1
16	LH HANDLEBAR	SPLICE #1
18	WINCH SELECT	FRONT CONTACTOR
20	FUEL SENDER	SPLICE #1
18	LH HEADLIGHT	SPLICE #1
20	SPEEDOMETER	SPEEDO DIAGNOSTIC
18	START SOLENOID	IGNITION SWITCH
18	IGNITION SWITCH	LH HANDLEBAR
20	SPEEDOMETER	SPEEDO DIAGNOSTIC
18	BRAKE LIGHT SENSOR	SPLICE #2
20	SPEEDOMETER	TRANS SWITCH
18	RH HEADLIGHT	SPLICE #1
18	SSCB #2	THERMISTOR
18	SSCB #2	THERMISTOR
18	CDI	SPLICE #2
20	GEAR SIGNAL	RESISTOR MODULE
20	SPEEDOMETER	HUB COIL
18	RH HEADLIGHT	SPLICE #2
18	CDI	SPLICE #2
20	ETC AND AWD SWITCH	HUB COIL
20	SPEEDOMETER	POWER POINT
18	WINCH SELECT	REAR CONTACTOR
18	SSCB #1	SPLICE #2
18	LH HEADLIGHT	SPLICE #2
20	LH HANDLEBAR	SPLICE #1
18	TRANS SWITCH	RESISTOR MODULE
18	TRANS SWITCH	RESISTOR MODULE
18	IGNITION SWITCH	LH HANDLEBAR
16	ACC #2	SSCB #1
18	TRANS SWITCH	RESISTOR MODULE
18	GROUND	SSCB #1
18	IGNITION SWITCH	SSCB #1
20	SPEEDOMETER	FUEL SENDER
20	SPEEDO DIAGNOSTIC	SPLICE #1
18	TAILLIGHT	SPLICE #2
16	POWER POINT	ACC #1
20	ETC AND AWD SWITCH	SPLICE #1
18	IGNITION SWITCH	SSCB #1
20	SPEEDOMETER	GEAR SIGNAL
16	ACC #1	ACC #2
16	GROUND	SPLICE #1
16	SPLICE #1	SPLICE #2
16	SPLICE #1	SPLICE #1
20	ETC AND AWD SWITCH	SPLICE #2
16	I.R. RELAY	SPLICE #2
18	START SOLENOID	SPLICE #2
18	WINCH SELECT	REAR CONTACTOR
18	I.R. SWITCH	SPLICE #1
18	WINCH SELECT	WINCH CONTROL
18	WINCH SELECT	WINCH CONTROL
18	BRAKE LIGHT SENSOR	TAILLIGHT
18	I.R. LAMP	SPLICE #2
18	I.R. RELAY	SPEEDO DIAGNOSTIC
18	I.R. LAMP	I.R. SWITCH
18	I.R. LAMP	I.R. RELAY
18	I.R. LAMP	I.R. RELAY
16	I.R. RELAY	SPLICE #2
18	I.R. SWITCH	WINCH CONTROL

REF #	COLOR
01	BLACK
02	BROWN
03	BLACK
04	BLUE/WHITE
05	YELLOW
06	BROWN
07	BROWN
08	BROWN
09	BROWN
10	BROWN/YELLOW
11	RED/WHITE
12	BROWN
13	GREEN
14	GREEN/WHITE
15	YELLOW/RED
16	GRAY/ORANGE
17	ORANGE
18	PURPLE
19	BROWN
20	RED
21	RED
22	BROWN
23	RED/WHITE
24	RED/WHITE
25	BLACK/WHITE
26	ORANGE/BLACK
27	GREEN/WHITE
28	BROWN
29	GREEN
30	GREEN
31	WHITE/RED
32	RED/BLACK
33	BLUE
34	RED/WHITE
35	BROWN/RED
36	GREEN
37	YELLOW/BLACK
38	YELLOW/BLACK
39	BROWN
40	WHITE
41	BROWN/WHITE
42	BROWN/YELLOW
43	RED/WHITE
44	GRAY
45	ORANGE/WHITE
46	BLACK/RED
47	RED/WHITE
48	BROWN/YELLOW
49	BROWN
50	BLUE/RED
51	WHITE/BLUE
52	RED/BLACK
53	ORANGE/WHITE
54	ORANGE/RED
55	BROWN
56	ORANGE
57	PURPLE/WHITE
58	BROWN
59	BROWN/YELLOW
60	ORANGE/WHITE
61	RED/WHITE
62	ORANGE
63	WHITE
64	ORANGE/WHITE
65	BROWN
66	RED/WHITE
67	BROWN
68	BLACK
69	BROWN/YELLOW
70	BROWN
71	GREEN/RED
72	RED/WHITE
73	GREEN
74	BLACK
75	RED/WHITE
76	BROWN
77	GREEN
78	YELLOW/BROWN
79	YELLOW/BROWN
80	BROWN
81	BROWN
82	RED/WHITE



STATOR	RESISTANCES (±15% @ 68°F/20°C)		
BATTERY CHARGE COIL	Y TO Y/R	0.31 OHMS
	Y TO Y/BRN	0.29 OHMS
	Y/R TO Y/BRN	0.29 OHMS
	Y TO GROUND	OPEN
DETECTION COIL	OR TO W	0.10 OHMS
	OR TO GROUND	OPEN
TRIGGER CHARGE COIL	BLU TO GRN	190 OHMS
	BLU TO GROUND	OPEN
IGNITION COIL	PRIMARY	W/BLK 0.19 OHMS
	SECONDARY	WIRE-WIRE 5.0k PLUS 5k PER CAP (15k TOTAL)

SMALL WIRE RESISTANCE	
BRN-GRN	4±0.5Ω
BRN-BLK	4±0.5Ω

LARGE WIRE RESISTANCE		
NO POWER	BLK-Y	0 Ω
	BLK-BLU	0 Ω
	BLK-R	OPEN
GRN POWER	BLK-Y	0 Ω
	BLU-R	0 Ω
	BLK-R	OPEN
BLK POWER	R-Y	0 Ω
	BLU-BRN	0 Ω
	BLK-R	OPEN

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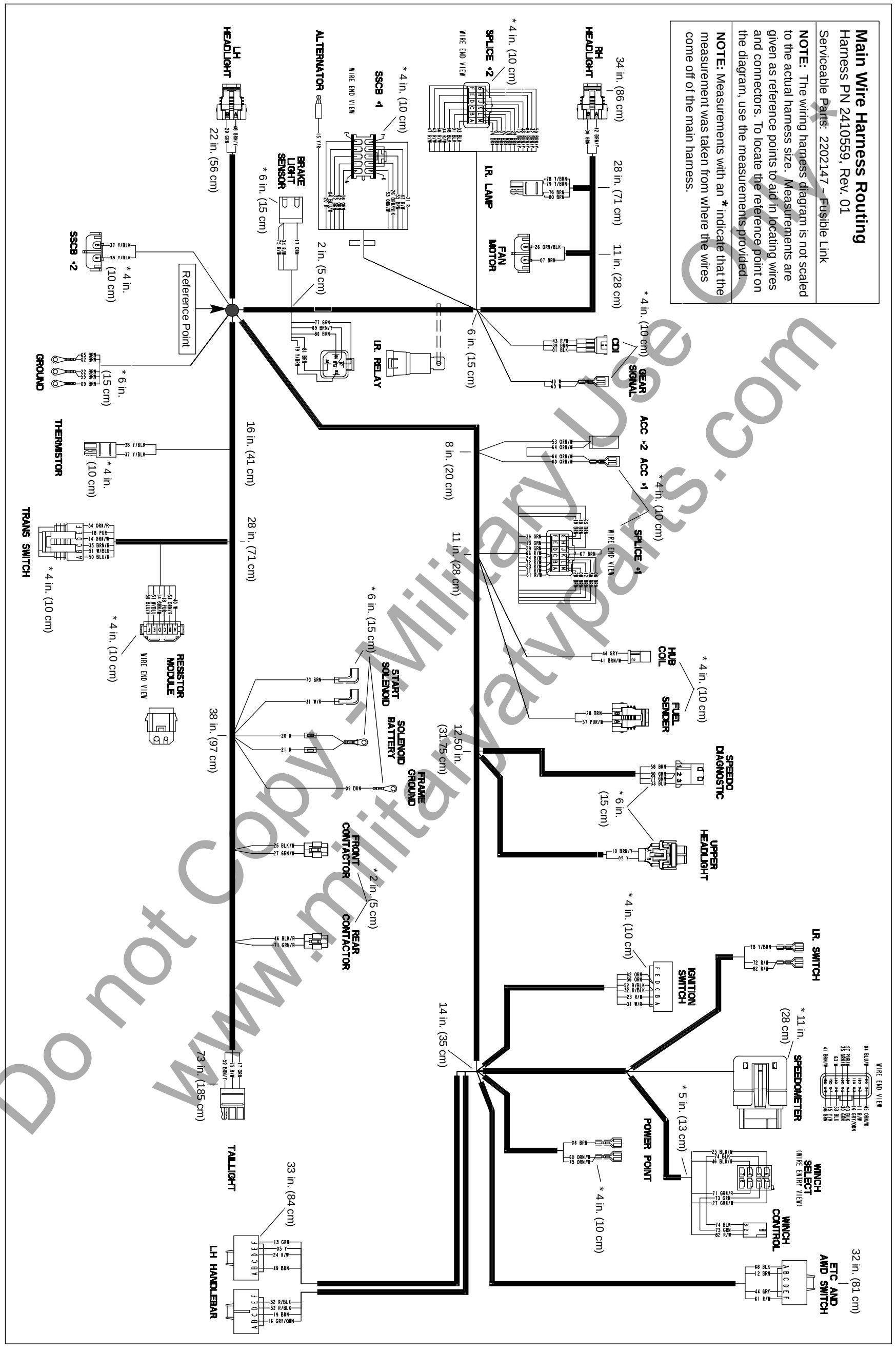
WIRING HARNESS – 2005 SPORTSMAN MV (MILITARY VERSION)

Main Wire Harness Routing
Harness PN 2410559, Rev. 01

Serviceable Parts: 2202147 – Fusible Link

NOTE: The wiring harness diagram is not scaled to the actual harness size. Measurements are given as reference points to aid in locating wires and connectors. To locate the reference point on the diagram, use the measurements provided.

NOTE: Measurements with an * indicate that the measurement was taken from where the wires come off of the main harness.



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WIRING HARNESS - 2005 SPORTSMAN MV (MILITARY VERSION)

Main Wire Harness Routing
Harness PN 2410559, Rev. 01
Serviceable Parts: 2202147 - Fusible Link

WIRE TERMINATION TABLE				
REF #	COLOR	GAUGE	FROM CONNECTOR	TO CONNECTOR
01	BLACK	20	CDI	SPLICE #2
02	BROWN	16	GROUND	SPLICE #2
03	BLACK	20	SPEEDOMETER	SPLICE #2
04	BLUE/WHITE	20	SPEEDOMETER	SSCB #1
05	YELLOW		UPPER HEADLIGHT	LH HANDLEBAR
06	BROWN	16	POWER POINT	SPLICE #1
07	BROWN	16	FAN MOTOR	SPLICE #2
08	BROWN	20	SPEEDOMETER	SPLICE #1
09	BROWN	14	GROUND	FRAME GROUND
10	BROWN/YELLOW		UPPER HEADLIGHT	SPLICE #2
11	RED/WHITE	20	SPEEDOMETER	SPLICE #1
12	BROWN	20	ETC AND AWD SWITCH	SPLICE #1
13	GREEN		LH HANDLEBAR	SPLICE #1
14	GREEN/WHITE		TRANS SWITCH	RESISTOR MODULE
15	YELLOW/RED	20	CDI	SPEEDOMETER
16	GRAY/ORANGE	20	SPEEDOMETER	LH HANDLEBAR
17	ORANGE		TAILLIGHT	BRAKE LIGHT SENSOR
18	PURPLE		TRANS SWITCH	RESISTOR MODULE
19	BROWN	20	LH HANDLEBAR	SPLICE #1
20	RED	16	FUSIBLE LINK	SSCB #1
21	RED	16	FUSIBLE LINK	SSCB #1
22	BROWN		SSCB #1	GROUND
23	RED/WHITE		IGNITION SWITCH	SPLICE #1
24	RED/WHITE	16	LH HANDLEBAR	SPLICE #1
25	BLACK/WHITE		WINCH SELECT	FRONT CONTACTOR
26	ORANGE/BLACK	16	SSCB #1	FAN MOTOR
27	GREEN/WHITE		WINCH SELECT	FRONT CONTACTOR
28	BROWN	20	FUEL SENDER	SPLICE #1
29	GREEN		LH HEADLIGHT	SPLICE #1
30	GREEN	20	SPEEDOMETER	SPEEDO DIAGNOSTIC
31	WHITE/RED		START SOLENOID	IGNITION SWITCH
32	RED/BLACK		IGNITION SWITCH	LH HANDLEBAR
33	BLUE	20	SPEEDOMETER	SPEEDO DIAGNOSTIC
34	RED/WHITE		BRAKE LIGHT SENSOR	SPLICE #2
35	BROWN/RED	20	SPEEDOMETER	TRANS SWITCH
36	GREEN		RH HEADLIGHT	SPLICE #1
37	YELLOW/BLACK		SSCB #2	THERMISTOR
38	YELLOW/BLACK		SSCB #2	THERMISTOR
39	BROWN		CDI	SPLICE #2
40	WHITE	20	GEAR SIGNAL	RESISTOR MODULE
41	BROWN/WHITE	20	SPEEDOMETER	HUB COIL
42	BROWN/YELLOW		RH HEADLIGHT	SPLICE #2
43	RED/WHITE		CDI	SPLICE #2
44	GRAY	20	ETC AND AWD SWITCH	HUB COIL
45	ORANGE/WHITE	20	SPEEDOMETER	POWER POINT
46	BLACK/RED		WINCH SELECT	REAR CONTACTOR
47	RED/WHITE		SSCB #1	SPLICE #2
48	BROWN/YELLOW		LH HEADLIGHT	SPLICE #2
49	BROWN	20	LH HANDLEBAR	SPLICE #1
50	BLUE/RED		TRANS SWITCH	RESISTOR MODULE
51	WHITE/BLUE		TRANS SWITCH	RESISTOR MODULE
52	RED/BLACK		IGNITION SWITCH	LH HANDLEBAR
53	ORANGE/WHITE	16	ACC #2	SSCB #1
54	ORANGE/RED		TRANS SWITCH	RESISTOR MODULE
55	BROWN		GROUND	SSCB #1
56	ORANGE		IGNITION SWITCH	SSCB #1
57	PURPLE/WHITE	20	SPEEDOMETER	FUEL SENDER
58	BROWN	20	SPEEDO DIAGNOSTIC	SPLICE #1
59	BROWN/YELLOW		TAILLIGHT	SPLICE #2
60	ORANGE/WHITE	16	POWER POINT	ACC #1
61	RED/WHITE	20	ETC AND AWD SWITCH	SPLICE #1
62	ORANGE		IGNITION SWITCH	SSCB #1
63	WHITE	20	SPEEDOMETER	GEAR SIGNAL
64	ORANGE/WHITE	16	ACC #1	ACC #2
65	BROWN	16	GROUND	SPLICE #1
66	RED/WHITE	16	SPLICE #1	SPLICE #2
67	BROWN	16	SPLICE #1	SPLICE #1
68	BLACK	20	ETC AND AWD SWITCH	SPLICE #2
69	BROWN/YELLOW	16	I.R. RELAY	SPLICE #2
70	BROWN		START SOLENOID	SPLICE #2
71	GREEN/RED		WINCH SELECT	REAR CONTACTOR
72	RED/WHITE		I.R. SWITCH	SPLICE #1
73	GREEN		WINCH SELECT	WINCH CONTROL
74	BLACK		WINCH SELECT	WINCH CONTROL
75	RED/WHITE		BRAKE LIGHT SENSOR	TAILLIGHT
76	BROWN		I.R. LAMP	SPLICE #2
77	GREEN		I.R. RELAY	SPEEDO DIAGNOSTIC
78	YELLOW/BROWN		I.R. LAMP	I.R. SWITCH
79	YELLOW/BROWN		I.R. LAMP	I.R. RELAY
80	BROWN		I.R. LAMP	I.R. RELAY
81	BROWN	16	I.R. RELAY	SPLICE #2
82	RED/WHITE		I.R. SWITCH	WINCH CONTROL

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